# NASA TECH BRIEF

## NASA Pasadena Office



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## Satellite Auxiliary Propulsion Systems

A concise summary of available satellite auxiliary propulsion systems is part of a report which describes techniques for selecting an optimum system for a given satellite mission. Descriptions of the propulsion systems are presented, along with illustrations and diagrams, in a language which can be readily understood by the technically-trained individuals who work in industries that are far removed from aerospace technology; the large number of references makes possible detailed investigation of selected areas of interest, and it is therefore possible for nonaerospace industries to take advantage of the results of a broad spectrum of NASA activities.

The section of the report on cost-effectiveness technique is presented in a fashion which should appeal to business managers and administrators inasmuch as the usual rigorous mathematical treatment is omitted, and examples are given in palatable form.

The discussion of reliability is an especially useful part of the report since reliability is an essential part of a cost-effectiveness analysis. The philosophy of reliability measurements and estimates is presented instead of the usual mathematical formulae; pertinent examples of reliability estimates are provided along with an explanation of the redundancy concepts applicable to space missions, but the concepts can readily be applied to terrestrial systems.

### Note:

The following document may be obtained from: National Technical Information Service Springfield, Virginia 22151 Single document price \$6.00 (or microfiche \$0.95)

#### Reference:

JPL Technical Report 32-1505 (N71-11877), Satellite Auxiliary-Propulsion Selection Techniques.

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